# **RAW SEQUENCE LISTING**

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number:	09/889,33 <i>1B</i>
Source:	1FW/6
Date Processed by STIC:	1/14/05
	,,,,,

# ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 01/14/2005
PATENT APPLICATION: US/09/889,331B TIME: 17:11:43

Input Set : A:\249-167 subst seq listing.txt
Output Set: N:\CRF4\01142005\I889331B.raw

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3 <110> APPLICANT: YOUNG, ANDREW
      4 GEDULIN, BRONISLAVA
      6 <120> TITLE OF INVENTION: METHODS FOR GLUCAGON SUPPRESSION
      8 <130> FILE REFERENCE: 030639.0031.UTL (249/167 US)
     10 <140> CURRENT APPLICATION NUMBER: 09/889,331B
C--> 11 <141> CURRENT FILING DATE: 2001-12-18
     13 <150> PRIOR APPLICATION NUMBER: PCT/US00/00942
     14 <151> PRIOR FILING DATE: 2000-01-14
     16 <150> PRIOR APPLICATION NUMBER: 60/116,380
    17 <151> PRIOR FILING DATE: 1999-01-14
    19 <150> PRIOR APPLICATION NUMBER: 60/132,017
    20 <151> PRIOR FILING DATE: 1999-04-30
    22 <150> PRIOR APPLICATION NUMBER: 60/175,365
    23 <151> PRIOR FILING DATE: 2000-01-10
    25 <160> NUMBER OF SEQ ID NOS: 239
    27 <170> SOFTWARE: FastSEQ for Windows Version 4.0
W--> 28 Microsoft Word 97
    30 <210> SEQ ID NO: 1
    31 <211> LENGTH: 39
    32 <212> TYPE: PRT
    33 <213> ORGANISM: Heloderma Horridum
    35 <220> FEATURE:
    36 <221> NAME/KEY: AMIDATION
    37 <222> LOCATION: (39)
    38 <223> OTHER INFORMATION: Ser in position 39 is amidated
    40 <400> SEOUENCE: 1
    41 His Ser Asp Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
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                                           10
    44 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser
                   20
                                       25
    47 Ser Gly Ala Pro Pro Pro Ser
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    50 <210> SEQ ID NO: 2
    51 <211> LENGTH: 39
    52 <212> TYPE: PRT
    53 <213> ORGANISM: Heloderma Suspectum
    55 <220> FEATURE:
    56 <221> NAME/KEY: AMIDATION
    57 <222> LOCATION: (39)
    58 <223> OTHER INFORMATION: Ser in position 39 is amidated
    60 <400> SEQUENCE: 2
    61 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu
    62 1
                        5
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DATE: 01/14/2005

TIME: 17:11:43

Input Set : A:\249-167 subst seq listing.txt Output Set: N:\CRF4\01142005\1889331B.raw 64 Glu Ala Val Arq Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser 25 65 20 67 Ser Gly Ala Pro Pro Pro Ser 68 35 70 <210> SEQ ID NO: 3 71 <211> LENGTH: 30 72 <212> TYPE: PRT 73 <213> ORGANISM: Artificial Sequence 75 <220> FEATURE: 76 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Amino Acid Sequence 79 <400> SEQUENCE: 3 80 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu 5 83 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly 25 . 20 86 <210> SEQ ID NO: 4 87 <211> LENGTH: 30 88 <212> TYPE: PRT 89 <213> ORGANISM: Artificial Sequence 91 <220> FEATURE: 92 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Amino Acid Sequence 95 <220> FEATURE: 96 <221> NAME/KEY: AMIDATION 97 <222> LOCATION: (30) 98 <223> OTHER INFORMATION: Gly in position 30 is amidated 100 <400> SEQUENCE: 4 101 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu 5 104 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly 105 20 30 107 <210> SEQ ID NO: 5 108 <211> LENGTH: 30 109 <212> TYPE: PRT 110 <213> ORGANISM: Artificial Sequence 112 <220> FEATURE: 113 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 114 Construct 116 <220> FEATURE: 117 <221> NAME/KEY: MOD RES 118 <222> LOCATION: (30) 119 <223> OTHER INFORMATION: AMIDATION, Position 30 is Gly-NH2 121 <400> SEQUENCE: 5 122 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu 10 125 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/889,331B

128 <210> SEQ ID NO: 6

RAW SEQUENCE LISTING DATE: 01/14/2005
PATENT APPLICATION: US/09/889,331B TIME: 17:11:43

Input Set : A:\249-167 subst seq listing.txt
Output Set: N:\CRF4\01142005\I889331B.raw

129 <211> LENGTH: 28 130 <212> TYPE: PRT 131 <213> ORGANISM: Artificial Sequence 133 <220> FEATURE: 134 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 135 Construct 137 <220> FEATURE: 138 <221> NAME/KEY: MOD RES 139 <222> LOCATION: (28) 140 <223> OTHER INFORMATION: AMIDATION, Position 28 is Asn-NH2 142 <400> SEQUENCE: 6 143 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu 5 146 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn 149 <210> SEQ ID NO: 7 150 <211> LENGTH: 39 151 <212> TYPE: PRT 152 <213> ORGANISM: Artificial Sequence 154 <220> FEATURE: 155 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Construct 158 <220> FEATURE: 159 <221> NAME/KEY: MOD RES 160 <222> LOCATION: (30) 161 <223> OTHER INFORMATION: AMIDATION, Position 30 is Gly-NH2 163 <400> SEQUENCE: 7 164 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu 5 10 167 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser 20 25 170 Ser Gly Ala Pro Pro Pro Ser 171 35 173 <210> SEQ ID NO: 8 174 <211> LENGTH: 28 175 <212> TYPE: PRT 176 <213> ORGANISM: Artificial Sequence 178 <220> FEATURE: 179 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Construct 182 <220> FEATURE: 183 <221> NAME/KEY: MOD RES 184 <222> LOCATION: (28) 185 <223> OTHER INFORMATION: AMIDATION, Position 28 is Asn-NH2 187 <400> SEQUENCE: 8 188 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu 5 10 191 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn 192 20

RAW SEQUENCE LISTING DATE: 01/14/2005 PATENT APPLICATION: US/09/889,331B TIME: 17:11:43

Input Set : A:\249-167 subst seq listing.txt
Output Set: N:\CRF4\01142005\I889331B.raw

194 <210> SEO ID NO: 9 195 <211> LENGTH: 28 196 <212> TYPE: PRT 197 <213> ORGANISM: Artificial Sequence 199 <220> FEATURE: 200 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 201 Construct 203 <220> FEATURE: 204 <221> NAME/KEY: MOD RES 205 <222> LOCATION: (28) 206 <223> OTHER INFORMATION: AMIDATION, Position 28 is Asn-NH2 208 <400> SEQUENCE: 9 209 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu Glu 212 Ala Val Arg Leu Ala Ile Glu Phe Leu Lys Asn 213 20 216 <210> SEQ ID NO: 10 217 <211> LENGTH: 39 218 <212> TYPE: PRT 219 <213> ORGANISM: Artificial Sequence 221 <220> FEATURE: 222 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Construct 225 <220> FEATURE: 226 <221> NAME/KEY: MOD RES 227 <222> LOCATION: (39) 228 <223> OTHER INFORMATION: AMIDATION, Position 39 is Ser-NH2 230 <400> SEQUENCE: 10 231 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu 10 234 Glu Ala Val Arg Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser 235 20 237 Ser Gly Ala Pro Pro Pro Ser 238 35 240 <210> SEQ ID NO: 11 241 <211> LENGTH: 39 242 <212> TYPE: PRT 243 <213> ORGANISM: Artificial Sequence 245 <220> FEATURE: 246 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 247 Construct 249 <220> FEATURE: 250 <221> NAME/KEY: MOD RES 251 <222> LOCATION: (39) 252 <223> OTHER INFORMATION: AMIDATION, Position 39 is Ser-NH2 254 <400> SEQUENCE: 11 255 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Leu Glu Glu 258 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser

RAW SEQUENCE LISTING DATE: 01/14/2005
PATENT APPLICATION: US/09/889,331B TIME: 17:11:43

Input Set : A:\249-167 subst seq listing.txt
Output Set: N:\CRF4\01142005\I889331B.raw

259 20 25 30 261 Ser Gly Ala Pro Pro Pro Ser 35 264 <210> SEQ ID NO: 12 265 <211> LENGTH: 39 266 <212> TYPE: PRT 267 <213> ORGANISM: Artificial Sequence 269 <220> FEATURE: 270 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 271 Construct 273 <220> FEATURE: 274 <221> NAME/KEY: MOD RES 275 <222> LOCATION: (39) 276 <223> OTHER INFORMATION: AMIDATION, Position 39 is Ser-NH2 278 <400> SEQUENCE: 12 279 His Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu 280 1 282 Glu Ala Val Arq Leu Phe Ile Glu Phe Leu Lys Asn Gly Gly Pro Ser 283 285 Ser Gly Ala Pro Pro Pro Ser 286 35 288 <210> SEQ ID NO: 13 289 <211> LENGTH: 39 290 <212> TYPE: PRT 291 <213> ORGANISM: Artificial Sequence 293 <220> FEATURE: 294 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic 295 Construct 297 <220> FEATURE: 298 <221> NAME/KEY: MOD RES 299 <222> LOCATION: (39) 300 <223> OTHER INFORMATION: AMIDATION, Position 39 is Ser-NH2 302 <400> SEQUENCE: 13 303 Tyr Gly Glu Gly Thr Phe Thr Ser Asp Leu Ser Lys Gln Met Glu Glu 5 10 306 Glu Ala Val Arg Leu Phe Ile Glu Trp Leu Lys Asn Gly Gly Pro Ser 307 25 309 Ser Gly Ala Pro Pro Pro Ser 310 35 312 <210> SEQ ID NO: 14 313 <211> LENGTH: 39 314 <212> TYPE: PRT 315 <213> ORGANISM: Artificial Sequence 317 <220> FEATURE: 318 <223> OTHER INFORMATION: Description of Artificial Sequence: Synthetic Construct 321 <220> FEATURE: 322 <221> NAME/KEY: MOD RES 323 <222> LOCATION: (39)

RAW SEQUENCE LISTING ERROR SUMMARY DATE: 01/14/2005 PATENT APPLICATION: US/09/889,331B TIME: 17:11:44

Input Set: A:\249-167 subst seq listing.txt
Output Set: N:\CRF4\01142005\I889331B.raw

#### Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

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Seq#:16; Xaa Pos. 6
Seg#:21; Xaa Pos. 10
Seq#:22; Xaa Pos. 10
Seq#:23; Xaa Pos. 14
Seq#:24; Xaa Pos. 14
Seq#:25; Xaa Pos. 22
Seq#:29; Xaa Pos. 23
Seq#:32; Xaa Pos. 31,36,37,38
Seg#:33; Xaa Pos. 36,37,38
Seq#:34; Xaa Pos. 31,36,37,38
Seg#:35; Xaa Pos. 36,37,38
Seg#:36; Xaa Pos. 31,36,37,38
Seg#:37; Xaa Pos. 31,36,37,38
Seq#:38; Xaa Pos. 31,36,37,38
Seq#:39; Xaa Pos. 36,37,38
Seq#:40; Xaa Pos. 31,36,37,38
Seq#:41; Xaa Pos. 1,2,3,5,6,7,8,9,10,11,12,13,14,15,16,17,18,19,20,21,22,23
Seq#:41; Xaa Pos. 24,25,26,27,28,31,36,37,38
Seq#:42; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,23
Seq#:42; Xaa Pos. 24,25,26,27,28,31,36,37,38,39
Seq#:43; Xaa Pos. 1,2,3,5,6,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,23,24
Seq#:43; Xaa Pos. 25,26,27,28,31,36,37,38
Seq#:44; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,23
Seq#:44; Xaa Pos. 24,25,26,27,28,31,36,37,38
Seq#:45; Xaa Pos. 1,2,3,5,6,7,8,9,10,11,12,13,14,15,16,17,18,20,21,22,23,24
Seq#:45; Xaa Pos. 25,26,27,28,31,36,37,38
Seq#:46; Xaa Pos. 1,2,3,4,5,6,7,8,9,10,11,12,13,14,15,16,17,19,20,21,22,23
Seq#:46; Xaa Pos. 24,25,26,27,28,31,36,37,38,39
Seq#:47; Xaa Pos. 1,2,3,6,7,8,9,10,14,22,23,24,25,31,36,37,38,39
Seq#:48; Xaa Pos. 1,2,3,6,7,8,9,10,14,22,23,24,25,27,28,31,36,37,38,39
Seq#:91; Xaa Pos. 31,36,37,38
Seg#:92; Xaa Pos. 36,37,38
Seq#:93; Xaa Pos. 31
Seg#:94; Xaa Pos. 31,36,37
Seq#:95; Xaa Pos. 31,36,37
Seq#:96; Xaa Pos. 31,36
Seq#:99; Xaa Pos. 6
Seq#:103; Xaa Pos. 10
Seg#:104; Xaa Pos. 22
Seq#:105; Xaa Pos. 23
Seq#:109; Xaa Pos. 31,36,37
Seq#:110; Xaa Pos. 1,26
Seq#:111; Xaa Pos. 1,26
Seq#:112; Xaa Pos. 1,26
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RAW SEQUENCE LISTING ERROR SUMMARY DATE: 01/14/2005
PATENT APPLICATION: US/09/889,331B TIME: 17:11:44

Input Set : A:\249-167 subst seq listing.txt
Output Set: N:\CRF4\01142005\I889331B.raw

Seq#:113; Xaa Pos. 1,26
Seq#:114; Xaa Pos. 1,27
Seq#:115; Xaa Pos. 1,27
Seq#:116; Xaa Pos. 1,27
Seq#:117; Xaa Pos. 1,27
Seq#:133; Xaa Pos. 6
Seq#:134; Xaa Pos. 6

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/889,331B

L:11 M:271 C: Current Filing Date differs, Replaced Current Filing Date

DATE: 01/14/2005 TIME: 17:11:44

Input Set : A:\249-167 subst seq listing.txt
Output Set: N:\CRF4\01142005\I889331B.raw

L:28 M:259 W: Allowed number of lines exceeded, <170> SOFTWARE: L:380 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:16 after pos.:0 L:505 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21 after pos.:0 L:534 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:22 after pos.:0 L:563 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:23 after pos.:0 L:587 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:24 after pos.:0 L:619 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25 after pos.:16 L:720 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29 after pos.:16 L:802 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:32 after pos.:16 M:341 Repeated in SeqNo=32 L:834 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33 after pos.:32 L:865 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:34 after pos.:16 M:341 Repeated in SegNo=34 L:897 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:35 after pos.:32 L:928 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:36 after pos.:16 M:341 Repeated in SeqNo=36 L:962 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37 after pos.:16 M:341 Repeated in SeqNo=37 L:996 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38 after pos.:16 M:341 Repeated in SeqNo=38 L:1028 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:39 after pos.:32 L:1059 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:40 after pos.:16 M:341 Repeated in SeqNo=40 L:1262 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:41 after pos.:0 M:341 Repeated in SeqNo=41 L:1478 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42 after pos.:0 M:341 Repeated in SeqNo=42 L:1677 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43 after pos.:0 M:341 Repeated in SeqNo=43 L:1890 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:44 after pos.:0 M:341 Repeated in SeqNo=44 L:2103 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45 after pos.:0 M:341 Repeated in SeqNo=45 L:2330 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0 M:341 Repeated in SeqNo=46 L:2442 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0 M:341 Repeated in SeqNo=47 L:2566 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:48 after pos.:0 M:341 Repeated in SeqNo=48 L:3521 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:91 after pos.:16 M:341 Repeated in SeqNo=91 L:3554 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:92 after pos.:32 L:3580 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:93 after pos.:16 L:3614 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94 after pos.:16 M:341 Repeated in SeqNo=94 L:3649 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:95 after pos.:16 M:341 Repeated in SeqNo=95

## VERIFICATION SUMMARY

PATENT APPLICATION: US/09/889,331B

DATE: 01/14/2005 TIME: 17:11:44

Input Set : A:\249-167 subst seq listing.txt
Output Set: N:\CRF4\01142005\I889331B.raw

L:3683 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:96 after pos.:16

M:341 Repeated in SeqNo=96

L:3754 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99 after pos.:0 L:3843 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103 after pos.:0